

CIRM Awards \$16 Million to Build the Foundation for Future Therapies

Posted: August 19, 2009

San Francisco, Calif., August 20, 2009 – A \$16 million infusion from the California Institute for Regenerative Medicine, the state stem cell agency, will support 12 researchers making stem cell discoveries that lay the foundation for future therapies. The 29-member Governing Board to CIRM voted to fund these Basic Biology Awards, which will go to five California institutions.

This is the first of the two-part Basic Biology Awards Initiative to be offered in 2009, with applications due for the second part, Basic Biology Awards II, in September. CIRM plans to offer future Basic Biology RFAs annually. The grants are intended to lead to advances in understanding basic mechanisms underlying stem cell biology, cellular plasticity, and cellular differentiation. Without a clear understanding of basic stem cell biology researchers will hit roadblocks in developing new therapies for disease.

Alan Trounson, CIRM President, said these grants to fund basic biology will maintain the flow of new ideas entering the research pipeline. "These basic biology grants will generate new ideas for future therapies and also provide information to help overcome barriers in bringing therapies to patients," he said.

Funding basic research is also a good economic investment, according to Trounson. Former acting NIH director Raynard Kington estimated that each dollar invested by the NIH stimulates \$2.50 in associated economic activity.

Other ICOC Business

The Governing Board approved concepts for two new rounds of funding: the CIRM Research Leadership Awards and the CIRM Stem Cell Transplantation and Immunology Awards. The Leadership Awards are intended to help draw talented faculty members to California institutions. According to a study carried out by Trounson and colleagues in Victoria, Australia, the recruitment of leading researchers brings an economic stimulus many times greater than the initial investment.

"The faculty recruitment RFA approved today will accelerate the pace toward cures in California by attracting national and international leaders dedicated to finding stem cell-based therapies for disease," said Robert Klein, Chair of the Governing Board. "Californians will see both medical advances and leveraged economic gains from the additional funds. Each recruited stem cell leader brings twelve to fifteen laboratory personnel, which will provide millions of additional dollars to California and speed the search for stem cell-based therapies and cures."

The transplantation immunulogy awards will fund researchers working to circumvent immune rejection of future stem cell-based medicine. Immune tolerance to new cell products is one of the most important aspects to delivering stem cell therapies and overcoming those barriers should speed the process of bringing potential new therapies to human trials, according to Trounson. The application for this award is expected to be available in November.

The Board discussed recommendations from the state's Little Hoover Commission, which recently reviewed CIRM operations. CIRM has already adopted the suggestion that all Governing Board votes appear online in the meeting minutes. According to two legal opinions, many of the commission's additional recommendations would require a vote by the California public, which the board decided was not in the best interest of the agency's mission. In addition to concerns about slowing the agency's work and delaying new therapies, board members felt that the 2004 vote of seven million people should be respected. In an effort to avoid delays in the search for therapies, the Board took the advice of the Legislative Subcommittee and voted against taking up the commission's recommendations with one exception. The board remains open to the possibility of lifting the 50-person cap on staff, while staying within the six percent limit on administrative overhead for the agency.

Basic Biology Awards

Grant Number	Institution	Researcher Name	Total Funding
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RB1- 01292	Stanford University	Helen Blau	\$1,414,841
RB1- 01328	University of California, Los Angeles	Luisa Iruela-Arispe	\$1,371,477
RB1- 01353	University of Southern California	Wange Lu	\$1,468,360
RB1- 01354	University of California, Los Angeles	W. Robb MacLellan	\$1,378,076
RB1- 01358	Stanford University	Susan McConnell	\$1,407,076
RB1- 01367	University of California, Los Angeles	Bennett Novitch	\$1,363,262
RB1- 01372	University of Southern California	Martin Pera	\$1,440,822
RB1- 01385	Stanford University	Julien Sage	\$1,436,185
RB1- 01397	University of California, Los Angeles	Michael Teitel	\$1,323,029
RB1- 01406	University of California, San Diego	Karl Willert	\$1,376,802
RB1- 01413	University of California, San Diego	Gene Wei-Ming Yeo	\$1,376,802
RB1- 01417	University of California, Davis	Min Zhao	\$1,052,715
Total Funding			\$16,409,447

All Grants To-Date

Institution	Total Grants	Funds (Requested & Awarded)
Stanford University	39	\$111,270,174
University of California, San Francisco	29	\$83,808,866
University of California, Los Angeles	29	\$68,013,097
University of California, Irvine	22	\$59.757.564

University of Southern California 17 \$52:23 University of California, Davis 15 \$49:01 University of California, San Diego 24 \$45:5 Sanford Consortium for Regenerative Medicine 1 \$43:00 University of California, Berkelery 10 \$34.60 Scripps Research Institute 11 \$27:55 Buck Institute for Age Research 4 \$25:41 The Salk Institute for Biological Studies 12 \$24.15 Burnham Institute for Medical Research 15 \$23:1 The J. David Gladstone Institutes 13 \$22.6 University of California, Santa Cruz 9 \$19:3 University of California, Santa Cruz 9 \$19:3 University of California, Merced 5 \$8:4 University of California, Santa Barbara 5 \$8:4 Novocell, Inc. 1 \$4.7 City of Hope National Medical Center 5 \$4.1 The Jackson Laboratory West 1 \$3.8 The Parkinson's Institute 1 \$3.4
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Scripps Health 1 \$3,1
Ludwig Institute for Cancer Research 3 \$2,4
California Institute of Technology 1 \$2,0
San Jose State University 1 \$1,73
California State University, Channel Islands
California State University, San Marcos
Pasadena City College 1 \$1,7
San Francisco State University 1 \$1,75
Humboldt State University 1 \$1,6
California State Polytechnic University, Pomona 1 \$1,43

California Polytechnic State University, San Luis Obispo	1	\$1,396,509
California State University, Long Beach	1	\$1,337,700
California State University, Sacramento	1	\$1,321,440
VistaGen Therapeutics, Inc.	1	\$971,558
Gamma Medica-Ideas, Inc.	1	\$949,748
Vala Sciences, Inc.	1	\$906,629
Invitrogen Corporation	1	\$869,262
Fluidigm Corporation	1	\$749.520
Human BioMolecular Research Institute	1	\$714,654
Childrens Hospital Oakland Research Institute	1	\$55,000
Cedars-Sinai Medical Center	1	\$46,886
Grand Total	307	\$781,866,121

Related Media:

- Videos explaining stem cell research are available on the CIRM YouTube site www.youtube.com/cirmtv.
- Stem cell images are available at the CIRM Flickr site www.flickr.com/photos/cirm. These are available for use with credit to the scientist listed in the caption.

About CIRM CIRM was established in November, 2004 with the passage of Proposition 71, the California Stem Cell Research and Cures Act. The statewide ballot measure, which provided \$3 billion in funding for stem cell research at California universities and research institutions, was overwhelmingly approved by voters, and called for the establishment of an entity to make grants and provide loans for stem cell research, research facilities, and other vital research opportunities. To date, the CIRM governing board has approved 294 research and facility grants totaling more than \$761 million, making CIRM the largest source of funding for human embryonic stem cell research in the world. For more information, please visit www.cirm.ca.gov.

For Immediate Release

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